

Progressive

60

40

20

0

1

2



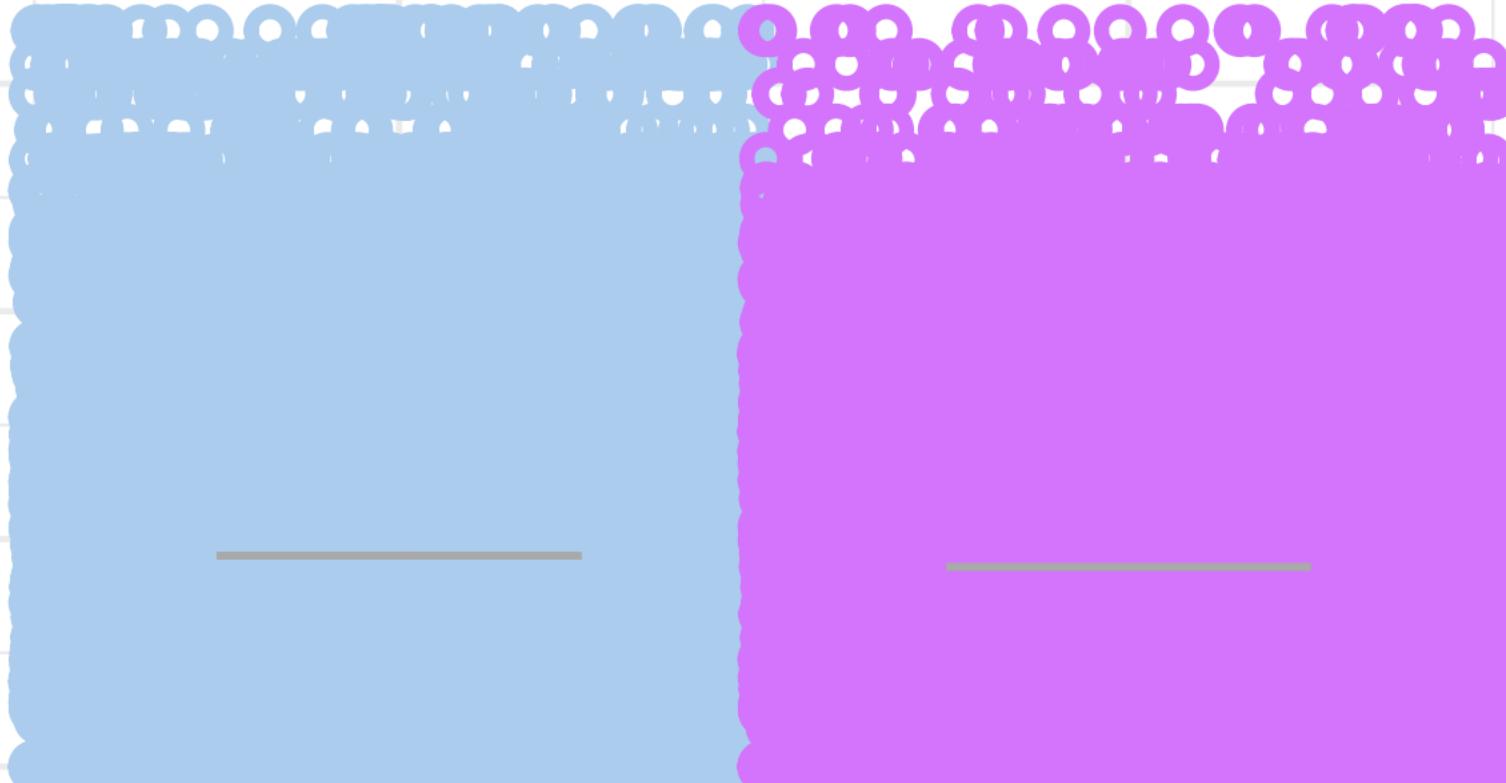
Deceased

60

40

20

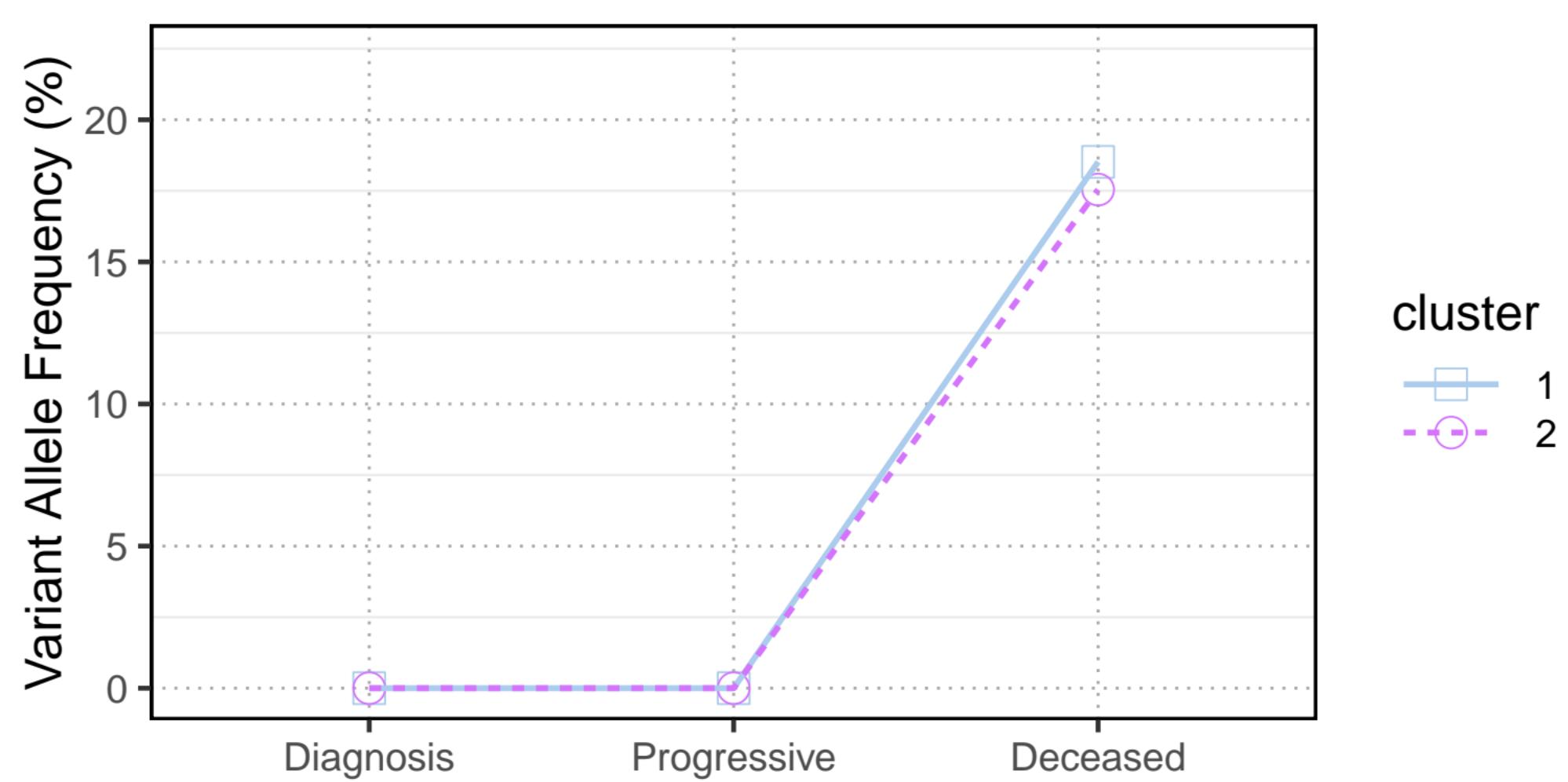
0



1

2

cluster



*Diagnosis,*Progressive,*Diagnosis,*Progressive,*Deceased

①

②

PIK3R1
HLA-B
TP53
PPM1D
MUC16
ATRX
AHNAK2
ATAD3B
PRSS1
SMARCB1
SLC35G5
ISM2

PIK3R1
HLA-B
TP53
PPM1D
MUC16
ATRX
AHNAK2
ATAD3B
PRSS1
SMARCB1
SLC35G5
ISM2

*Diagnosis,*Progressive,*Deceased

③

*Diagnosis,*Progressive,Deceased



PIK3R1
HLA-B
TP53
PPM1D
MUC16
ATRX
AHNAK2
ATAD3B
PRSS1
SMARCB1
SLC35G5
ISM2

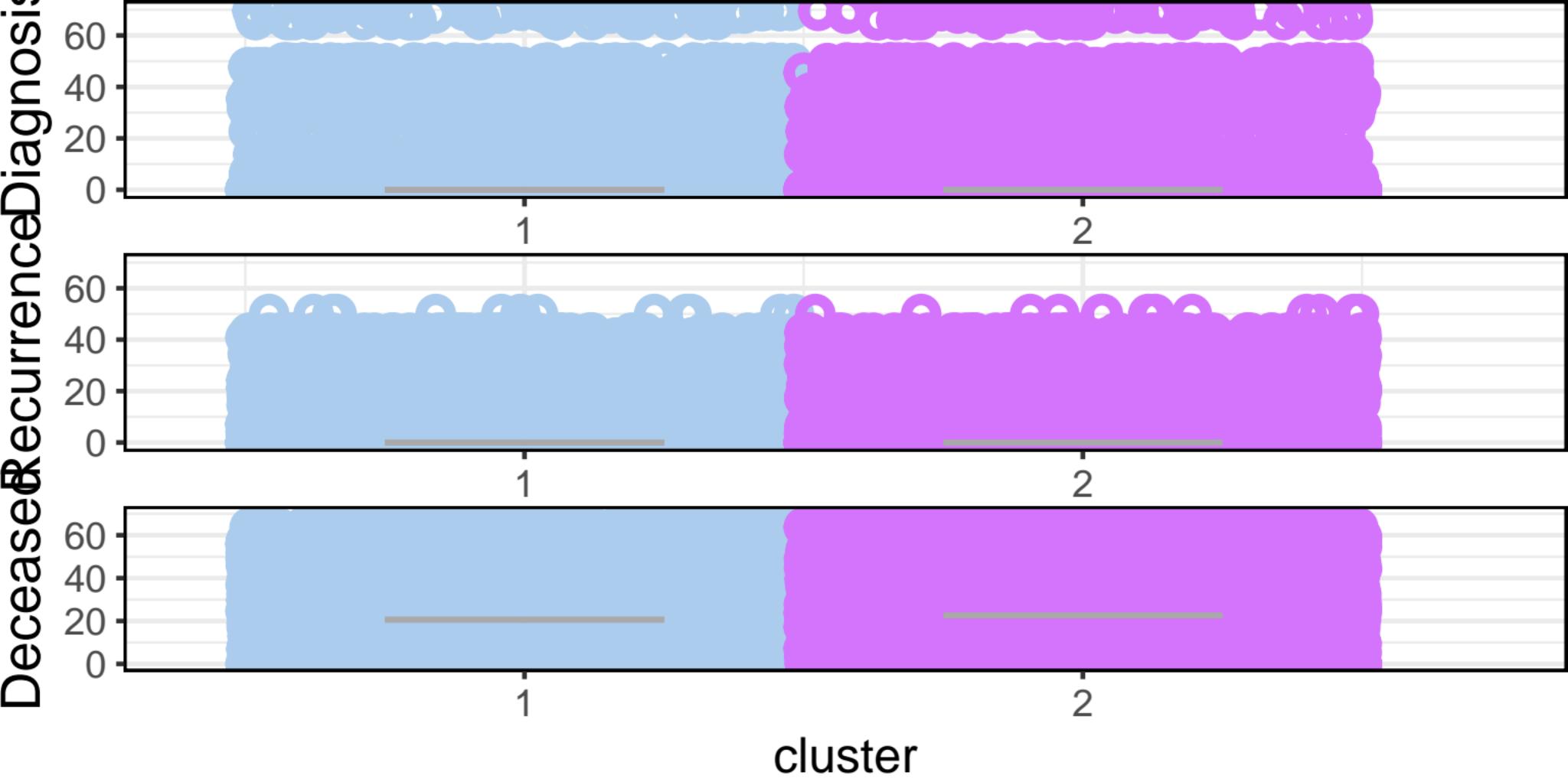
*Deceased

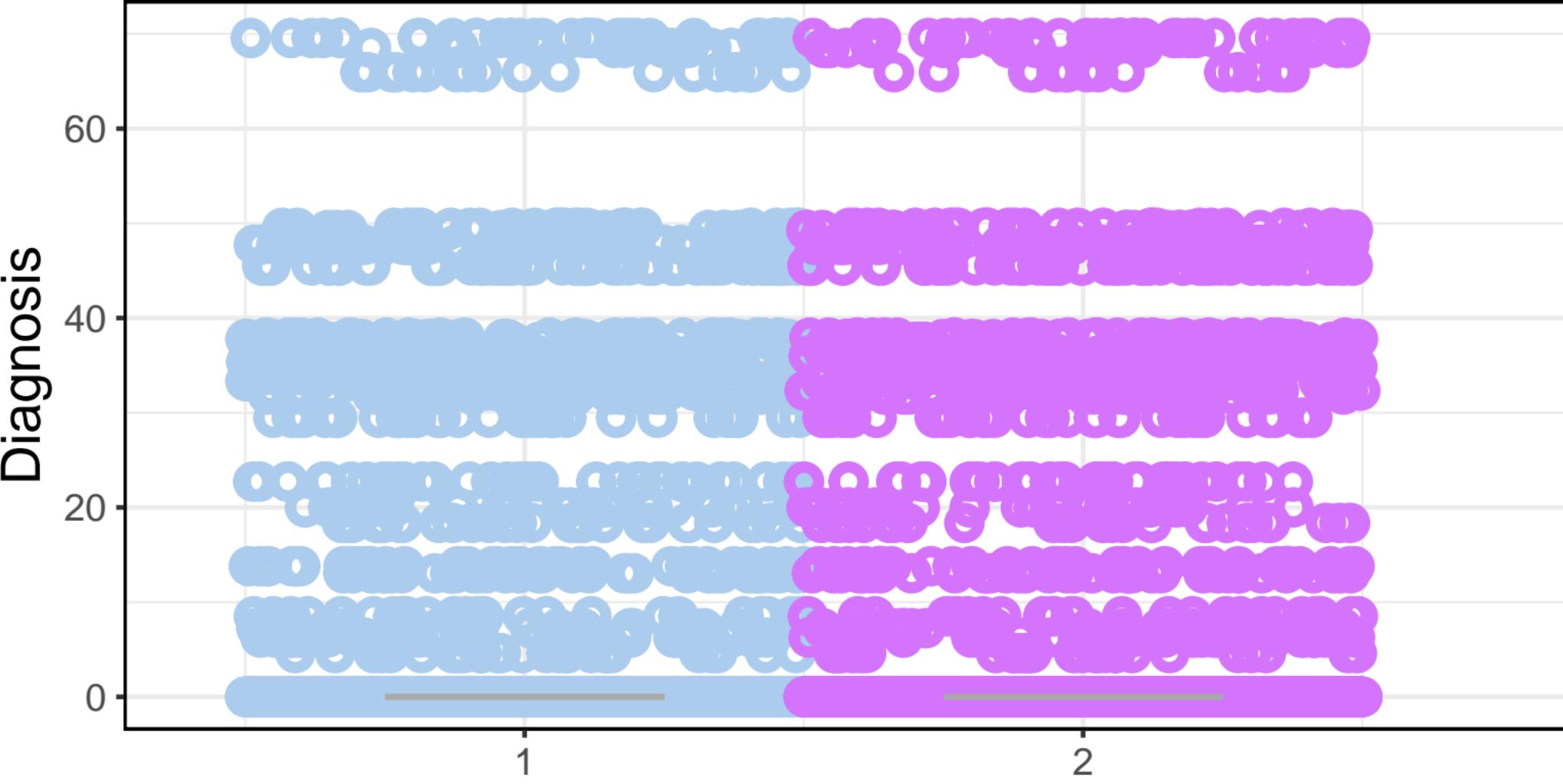


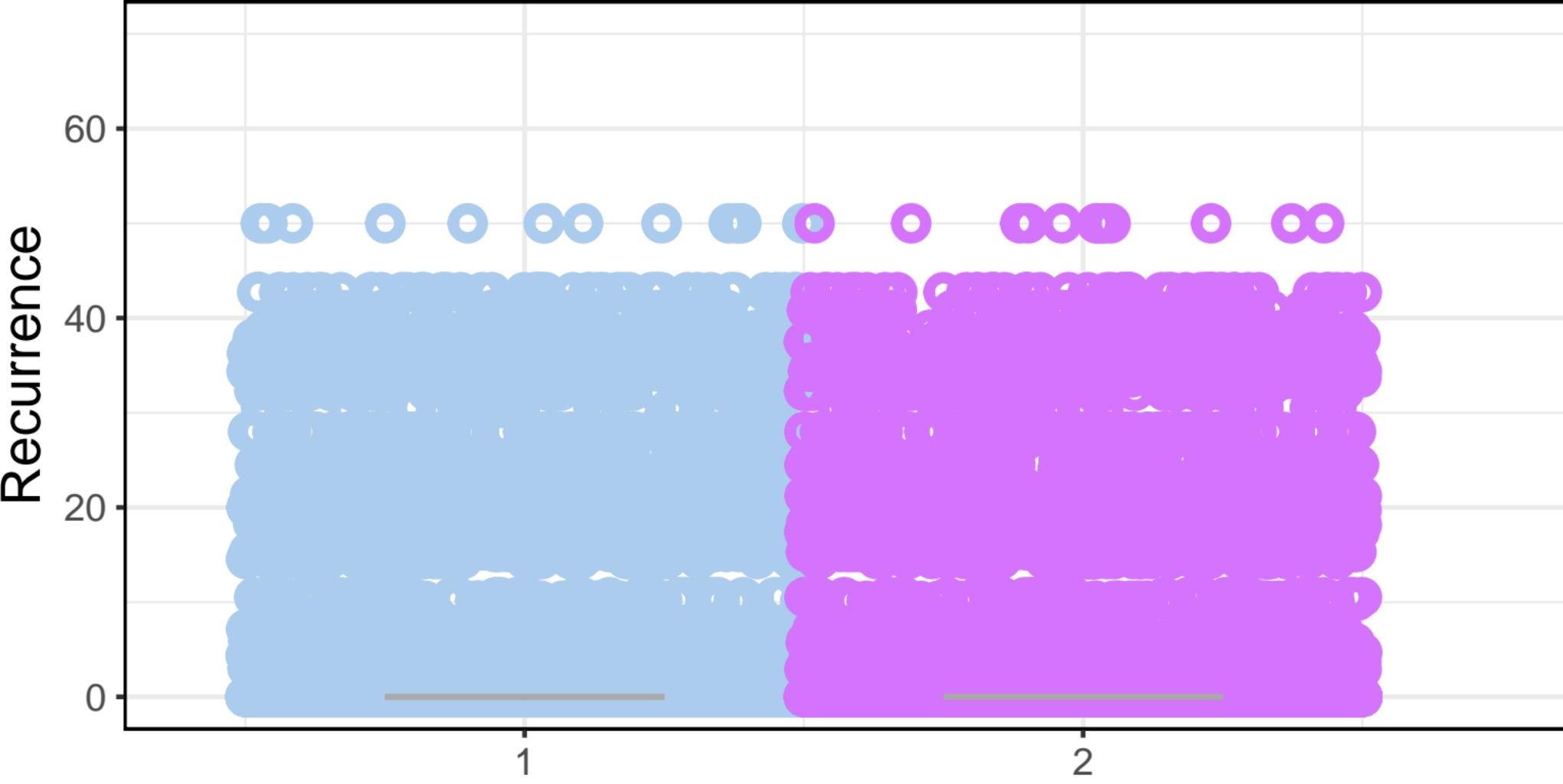
PIK3R1
HLA-B
TP53
PPM1D
MUC16
ATRX
AHNAK2
ATAD3B
PRSS1
SMARCB1
SLC35G5
ISM2

*Diagnosis,*Progressive,*Deceased









Deceased

60

40

20

0



1

2

cluster

Variant Allele Frequency (%)

20
10
0

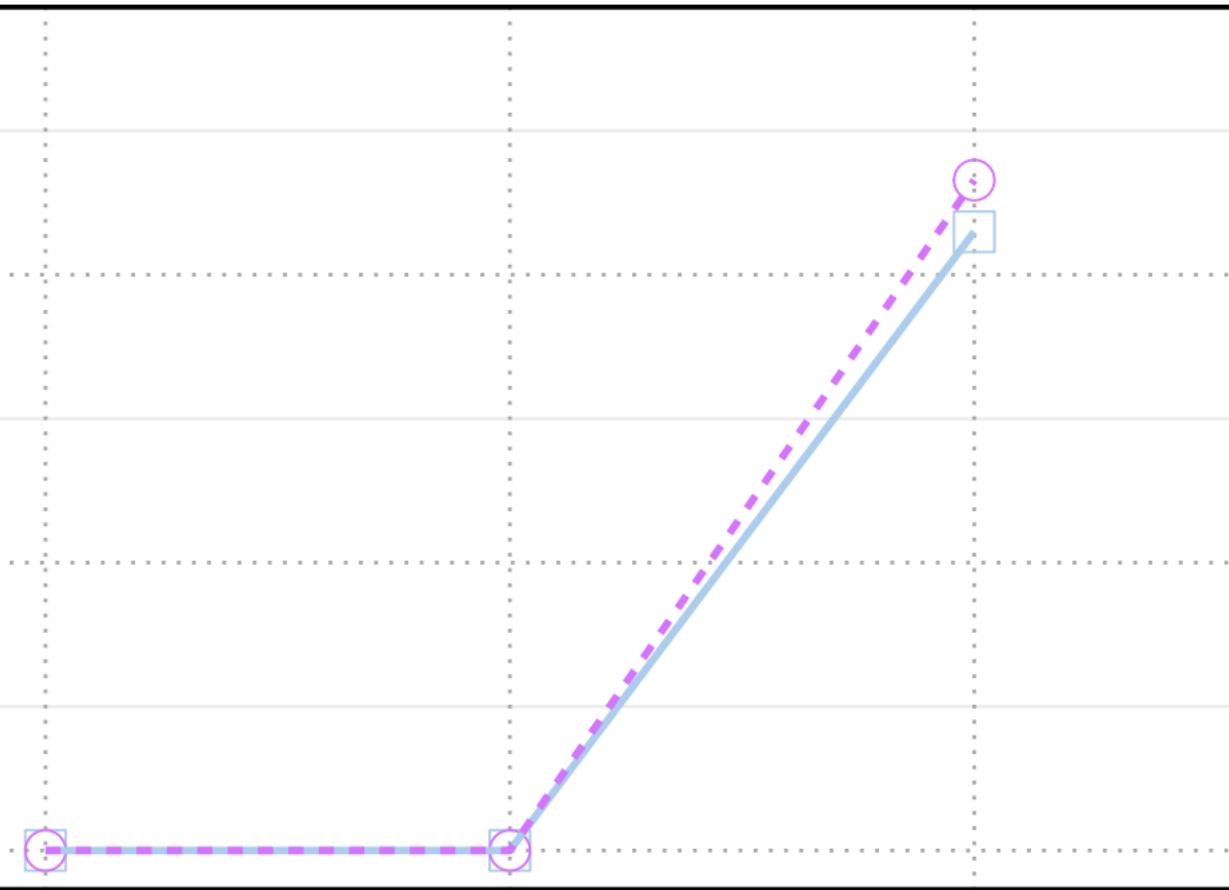
Diagnosis

Recurrence

Deceased

cluster

- 1
- 2



*Diagnosis,*Recurrence,*Deceased

①

②

TP53
PSMC5
CIC
OR2T34
NF1
EGFR
AHNAK2

TP53
PSMC5
CIC
OR2T34
NF1
EGFR
AHNAK2

*Diagnosis,*Recurrence,*Deceased

③

*Diagnosis,*Recurrence,Deceased



TP53
PSMC5
CIC
OR2T34
NF1
EGFR
AHNAK2

*Deceased



TP53
PSMC5
CIC
OR2T34
NF1
EGFR
AHNAK2

*Diagnosis,*Recurrence,*Deceased

